

TO INCREASE WATER SUPPLY OF WASHINGTON, D. C.

FEBRUARY 3, 1897.—Committed to the Committee of the Whole House on the state of the Union and ordered to be printed.

Mr. BABCOCK, from the Committee on the District of Columbia, submitted the following

REPORT.

[To accompany H. R. 10133.]

The Committee on the District of Columbia, to whom was referred the bill (H. R. 10133) to amend an act approved July 15, 1882, entitled "An act to increase the water supply of the city of Washington, and for other purposes," have had the same under consideration, and your committee recommend unanimously that the bill do pass.

The bill entitled "An act to increase the water supply of the city of Washington, and for other purposes," provides for the acquirement by the United States, by right of eminent domain or otherwise, of the title "to all the water rights at and in the vicinity of Great Falls, on the Potomac River, the water so taken to be used for any and all purposes, and also such land as may be necessary for these purposes."

The Great Falls are located about 14 miles above the city of Washington. In 2,000 feet the river falls 76 feet, as shown by the report of the Engineering Department of the United States. At the head of the falls is the dam of the Washington Aqueduct, 2,807 feet long, extending across the river from the Maryland to the Virginia shore. The Aqueduct connects with the waters above the dam and furnishes the city of Washington with its supply of water. Under the present improvement it is estimated by the Engineering Department 75,000,000 gallons of water per diem is the maximum amount of water that can be carried through the Aqueduct, and this constitutes the present provision for water for domestic use in the District of Columbia. It can not be long before this amount of water for domestic purposes will be insufficient, and further diversion for this purpose will be necessary. As claims are now pending against the United States for the water already diverted, and the subject of the purchase of the entire water rights is now proposed, we review the principal reasons presented in support of these claims and this bill.

(1) *Water power.*—The amount of water that can be diverted for domestic purposes under the present improvement is equal to 116 cubic feet per second, and reduces the available power at the falls that amount, and for this diversion damages have been claimed by the owners of the power at Great Falls. A record of the amount of water passing over the Government dam has been kept since the completion of the dam, in 1886, and from this and other data the minimum effective power at the falls is estimated to be about 10,000 horsepower. Taking

85 per cent as the efficiency of turbines, the power of a series of turbines below the falls at the lowest stage of the river would be about 8,500 horsepower. This power, transformed into electrical power, can be readily transmitted from the Great Falls to Washington.

It is believed to be very desirable that the United States should acquire this entire water right, and thereby secure for all time a sufficient water supply for the District of Columbia, and use the surplus water as power to generate electricity for lighting the Government buildings and the streets of the District of Columbia and for power to run the elevators, printing presses, and other machinery in the Government buildings and at the navy-yard.

(2) *Water supply.*—The water supply for the District of Columbia was first provided for under various acts and appropriations prior to 1882, the maximum supply being about 25,000,000 gallons of water daily. In the year 1882 the dam was extended across Conns Island to the Virginia shore, and thereby the maximum quantity of water provided for was increased 25,000,000 gallons per day, and in 1895 provision was made to increase the height of the dam about 3 feet, thereby making the present maximum amount of water available for domestic use 75,000,000 gallons per day, as above stated. It is estimated in the report compiled by Col. George H. Elliott upon the subject that "other increases of the amount of water required for the supply of Washington will be necessary from time to time, and it is estimated that not less than 200,000,000 gallons per day will ultimately be required." These diversions are, and further diversion will continue to be, subjects of claims and litigation on the part of the owners of the water power at Great Falls, unless the entire water rights are acquired.

Already suits for the value of the water diverted by the increase in the length of the dam and the height of the dam are pending in the Court of Claims, the claims aggregating \$773,000. These claims are based upon the theory that the permanent diversion of water above the falls reduces the available waterpower at the falls, and thereby injures the property rights of the Great Falls Power Company. These claims are estimated by taking a principal sum, which, at 4 or 5 per cent, will produce a yearly income equal to the value per annum per horsepower of the water so diverted. It can readily be seen that, figuring upon such a basis—and we believe this to be the rule adopted in similar cases—the damages for the diversion of the water under the present improvement and the further diversion which will be necessary in the future, estimated by Colonel Elliott, will amount to very large sums of money—more, possibly, if private developments of the water power are proceeded with, than it will now require to condemn the whole water right. It is, therefore, a wise and economical policy to condemn all the water rights at the Great Falls, thereby giving the United States the entire control of all the water, rather than to pay for the water diverted from time to time as it shall be taken.

(3) *Electric light and power.*—If the entire right to the water is secured the surplus water can be used by the Government in generating and transmitting to the District of Columbia electricity, to be used for illuminating and power purposes. A very careful estimate has been made by the Government engineers of the cost of putting up a plant sufficient to utilize the power at the Great Falls and light the public buildings, the streets of the District, and furnish power for the Government buildings. These estimates, together with the estimate for maintenance, show that the lighting and power can be furnished by using the surplus water at the Great Falls, at much less than can be done by

the use of steam power, and a much more desirable result obtained. The use of electricity for power purposes will also dispose of the smoke caused by the increased use of coal, already a subject of complaint and threatening injury to the beauty of public buildings and works of art in this District.

(4) As stated, it is believed that all the water rights and land necessary to carry out this plan can be condemned for a sum much less than the claims already made and which will be made for the diversion of water for domestic purposes, leaving the surplus water for use as power in generating electricity; and by the condemnation of the whole the Government will be rid of the litigation and claims for damages for the water diverted and will own and control for all time the entire water rights at the Great Falls. The improvements outlined can be made whenever it shall be deemed best.

The bill presented does not provide for any present appropriation of money, but does provide for the immediate condemnation of the entire water rights and lands required, the amount to be taken to be ascertained within three months by the Secretary of War and Attorney-General. It also provides for the ascertainment of the value of these water rights and lands, together with the settlement of all existing claims, by the Secretary of War and Attorney-General, these officers being given the power to appoint three disinterested persons to ascertain and advise them in reference to the values. If the Secretary and Attorney-General can not agree with the owners then the Attorney-General shall, within six months, bring suit in the supreme court of the District of Columbia and have the value ascertained by the court. This is believed to be a fair and just method of ascertaining the value of the property condemned.

OFFICE OF COMMISSIONERS OF DISTRICT OF COLUMBIA,
Washington, January 13, 1897.

DEAR SIR: I had expected to be present at the meeting of your committee this morning, and to show by my presence the interest which the Commissioners of the District of Columbia have in the proposed legislation embodied in the bill entitled "An act to increase the water supply of Washington, and for other purposes." I know of no measure before the Congress of more importance to the present and prospective best interests of the Capital.

As is well known to your committee, there are important interests belonging to the Great Falls Manufacturing Company and to the Chesapeake and Ohio Canal Company at the Great Falls of the Potomac. The proposed legislation, as I understand it, is to empower the supreme court of the District of Columbia to ascertain the value of these respective interests, and to provide by said legislation for the acquisition of the said rights by the United States. It would seem to be important to acquire these interests before any improvements shall be made, which may increase the cost of the condemnation.

As may be seen by the report of Col. George H. Elliott, of the Corps of Engineers, the amount of water flow at the Great Falls during low water periods is about 700,000,000 gallons per diem, and the amount diverted from the river for the supply of Washington is about 50,000,000 gallons per diem; that the raising of the dam at Great Falls would permit to be diverted from the river for the supply of Washington about 75,000,000 gallons per diem, and that 200,000,000 gallons per diem will ultimately be required for the uses of the people of the District of Columbia. He then shows that, after this amount shall have been diverted for the water supply, there will still run to waste at low water periods a water power of about 7,500 horsepower, of which about 6,400 horsepower could be used for generating electrical power, which would be more than sufficient, in his opinion, to light all public buildings and grounds of Washington and replace all of the gas lights of the city with electric lights. He estimates also that this would furnish sufficient electric power for pumping water to the high-surface areas of the city, for running the elevators in the public buildings, for heating these buildings, and for other public purposes.

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He also says that the rights of the United States, but a fraction of which have ever been utilized, have for many years been disputed and they are now disputed, and that large amounts of claims for damages are now pending against the Government. His conclusion is that the rights of the respective owners should be settled now and forever, and that the bill under consideration furnishes not only the best means of doing this fairly and with full justice to all parties; and that it is also a means for acquiring the remainder of the water rights at the Great Falls not now owned by the Government.

The Commissioners therefore earnestly beg that your committee give to this important measure early and favorable consideration.

Very respectfully,

JOHN W. ROSS, *President.*

Hon. J. W. BABCOCK,

Chairman Committee on the District of Columbia.

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